

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. (Currently Amended) A surveillance system for detecting an event, comprising:

a sensor for capturing a current image using a first exposure time to produce sensor values representing said current image and capturing an event image using a second exposure time ~~less than said first exposure time~~; and

an image processing system for performing a comparison of at least a portion of said sensor values representing said current image and spatially corresponding sensor values of a stored reference image captured using said first exposure time, said image processing system further for detecting said event in said current image based upon said comparison and instructing said sensor to capture said event image using the second exposure time;

wherein the first and second exposure times are, respectively, first and second time periods for exposing an array of pixels to capture a respective image to produce sensor values, and
the second exposure time is less than the first exposure time.
2. (Original) The surveillance system of Claim 1, wherein said image processing system is configured to perform said comparison by computing a difference value between at least a portion of sensor values representing said current image and spatially corresponding sensor values representing said reference image.
3. (Original) The surveillance system of Claim 2, wherein said image processing system is further configured to perform said comparison by determining whether said difference value exceeds a threshold, said image processing system being configured to detect said event when said difference value exceeds said threshold.
4. (Original) The surveillance system of Claim 1, wherein said image processing system is further configured to replace said reference image with said current image.
5. (Original) The surveillance system of Claim 1, further comprising:

an illumination source connected to said image processing system and operable in response thereto to provide artificial illumination during the capture of said event image.
6. (Original) The surveillance system of Claim 1, wherein said first exposure time is up to six seconds, and said second exposure time is up to 1/60 of a second.
7. (Original) The surveillance system of Claim 1, further comprising:

a storage medium for storing said event image.
8. (Original) The surveillance system of Claim 1, further comprising:

a transmission interface for transmitting said event image to an external security system.

9. (Original) The surveillance system of Claim 1, wherein said reference image and said current image are captured under an illumination level between one centilux and one lux.

10. (Currently Amended) A method for performing event detection within a surveillance system, the method comprising:

comparing a current image with a reference image, said current image and said reference image being captured using a first exposure time;

detecting an event based upon said comparing; and

capturing an event image using a second exposure time ~~less than said first exposure time;~~

wherein the first and second exposure times are, respectively, first and second time periods for exposing an array of pixels to capture a respective image to produce sensor values, and

the second exposure time is less than the first exposure time.

11. (Original) The method of Claim 10, wherein said comparing further comprises:

computing a difference value between at least a portion of sensor values representing said current image and spatially corresponding sensor values representing said reference image.

12. (Original) The method of Claim 11, wherein said comparison further comprises:

determining whether said difference value exceeds a threshold, said event being detected when said difference value exceeds said threshold.

13. (Original) The method of Claim 10, further comprising:

storing said current image as said reference image.

14. (Original) The method of Claim 10, further comprising:

in response to said detecting, providing artificial illumination during said capturing.

15. (Original) The method of Claim 10, further comprising:

transmitting said event image to an external security system.

16. (Original) The method of Claim 15, further comprising:

transmitting said event image over a wireless connection to said external security system.

17. (Currently Amended) A method for capturing an image of an event by a surveillance system, the method comprising:

comparing a current image with a reference image, said current image and said reference image being captured using a first exposure time;

detecting an event based upon said comparing;

in response to said detecting, providing artificial illumination; and

capturing an event image under the artificial illumination using a second exposure time ~~less than said first exposure time;~~

wherein the first and second exposure times are, respectively, first and second time periods for exposing an array of pixels to capture a respective image to produce sensor values, and

the second exposure time is less than the first exposure time.

18. (Original) The method of Claim 17, wherein said comparing further comprises:

computing a difference value between at least a portion of sensor values representing said current image and spatially corresponding sensor values representing said reference image.

19. (Original) The method of Claim 18, wherein said comparison further comprises:

determining whether said difference value exceeds a threshold, said event being detected when said difference value exceeds said threshold.

20. (Original) The method of Claim 17, further comprising:

capturing said reference image and said current image under an illumination level between one centilux and one lux.